

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 10

1200 Sixth Avenue, Suite 900 Seattle, WA 98101-3140

> OFFICE OF ECOSYSTEMS, TRIBAL AND PUBLIC AFFAIRS

July 11, 2014

Diane Wheeler U.S. Forest Service Soda Springs Ranger District 410 East Hooper Avenue Soda Springs, Idaho 83276

Re:

U.S. Environmental Protection Agency Comments on the Draft Environmental Impact Statement

for the Smoky Canyon, Panels F & G Lease and Mine Plan Modification

(EPA Project Number: 03-063-BLM).

Dear Ms. Wheeler:

Our review of the DEIS was conducted in accordance with our responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act. Section 309 specifically directs the EPA to review and comment in writing on the environmental impacts associated with all major federal actions.

The DEIS analyzes impacts of proposed modifications at Panels F & G at the Smoky Canyon Mine located in Southeast Idaho. Proposed activities vary by alternative and generally include construction of an ore conveyor system from Panel F to the mill, modification of the lease to accommodate expanded overburden disposal, use of a geo-synthetic clay laminate liner and/or mixed store and release cover, and implementation of stormwater control measures associated with the GCLL. The preferred alternative is identified as Alternative 1- constructed conveyor system, use of GCLL on 143 acres and geologic store and release cover on 250 acres, and additional stormwater control measures.

The expansion of Panels F &G were previously analyzed in the EIS 2007. However at that time, it was determined that the USFS and BLM did not have the authority to approve the full expansion. In 2009 BLM regulations were revised to allow lease modifications for disposal of overburden materials. The DEIS is tiered to the 2007 final EIS and, therefore, the majority of the analysis in the document is referenced to that NEPA analysis.

The preferred alternative contains improvements compared to the 2007 FEIS proposal. Although the overall seleniferous footprint will increase, the addition of a GCLL liner reduces infiltration and potential mobility of contaminants of potential concern. In addition, the conveyor system, which replaces haul vehicles from Panel F will reduce fugitive dust and emissions (DEIS Table 4.3-2).

The EPA supports the mine modification; however, we have concerns regarding groundwater and surface water impacts from the proposed expansion at Panel G. Specifically, we are concerned with impacts to Crow Creek, which is impaired from past mining practices at the confluence at South Fork Sage Creek and downstream. In addition the DEIS does not include pertinent, detailed information about

financial assurance costs for reclamation and closure. We are rating the preferred alternative EC-2 (Environmental Concerns- Insufficient Information). An explanation of the EPA rating system is enclosed. We are also enclosing additional detail regarding our concerns that we believe should be addressed in the final EIS.

We thank you for the opportunity to review the DEIS. If you need more information or would like to discuss these comments, please contact me at 206-553-1601 or via electronic mail at reichgott.christine@epa.gov, or Lynne Hood of my staff at, (208) 378-5757 or by electronic mail at hood.lynne@epa.gov.

incerely,

Christine B. Reichgott, Manager

Environmental Review and Sediment Management Unit

Enclosures:

- 1. EPA Detailed Comments
- 2. Figure 7.4-8. J.R. Simplot. 2014. DRAFT Remedial Investigation Report.
- 3. EPA Rating System for Draft Environmental Impact Statements

EPA Detailed Comments on the Smoky Canyon, Panels F & G Lease and Mine Plan Modification Draft Environmental Impact Statement

Groundwater and Surface Water Impacts

The EPA's main concern is the mobilization of selenium and other contaminants of potential concern from mine facilities to groundwater and surface water. We acknowledge that the conveyance system at Panel F would have little to no effect on this pathway; however, the Panel G expansion of the overburden disposal areas has the potential to impact water resources. Past mining practices at the mine site have resulted in elevated concentrations of selenium in groundwater and surface water and are currently being investigated through the Comprehensive Environmental Response, Compensation, and Liability Act. To address this ongoing concern, we believe that information from the May 2014 remedial investigation report regarding groundwater and surface water conditions/modeling should be considered in this analysis. Such information would help to more accurately develop predictions regarding the cumulative effects to Crow Creek. The final EIS should disclose the effects to water resources without assuming pre-decisional CERCLA clean-up actions.

The DEIS acknowledges activities under CERCLA and Remedial Investigation at Smoky Canyon Mine panels A-E in response to selenium contamination entering Hoopes Springs and South Fork Sage Creeka tributary directly influencing Crow Creek. Crow Creek also exhibits elevated levels of selenium at the confluence of SFSC and continuing downstream to the Wyoming State border. However, the DEIS does not include the most recent predictions on elevated concentrations of selenium in surface water in the project area¹ (i.e., Crow Creek) that were developed during the CERCLA investigation. Impacts to water resources from releases of selenium and other COPCs are the most significant issues at the mine site and therefore, we encourage BLM to incorporate the most current data in the analysis.

Groundwater beneath Panel G reports to Crow Creek via springs and seeps. Downstream of this area, Crow Creek is joined by SFSC which has been impacted by contaminated groundwater from the mined area from the Pole Canyon cross valley fill south. Modeling from the remedial investigation indicates that the concentration of selenium in groundwater and surface water will continue to increase for several more years. The DEIS does not incorporate this recent modeling but references only the groundwater/surface water analysis from the 2007 FEIS. The modeling included in the 2014 CERCLA revised draft RI predicts that a peak concentration of selenium which is 2-5 times greater than the current aquatic water quality standard of 0.005 mg/l and will not be reached at the Crow Creek/SFSC confluence for several years² (Figure 7.4-8 draft RI attached). Furthermore, following the peak concentration (low flow or high flow) the model indicates the possibility that the concentration of Se in surface water may remain above the selenium AWOS. Thus any addition contamination from Panel G could result in additional loading to portions of Crow Creek below the confluence with SFSC with the potential of a continuing exceedance of the aquatic criterion for selenium. This potential should be considered in the cumulative effects to Crow Creek. The final EIS should discuss the degree to which water impacted by mining Panel G could increase the Se concentration in Crow Creek below the confluence with SFSC.

¹ J.R. Simplot Company, May 2014, Draft CERCLA Remedial Investigation Report.

² Table 7.4.8 of the draft RI. Crow Creek Segment. The assumptions include Pole Canyon non-time critical removal action.

The DEIS notes that the proposed GCLL cover would result in reduced infiltration and therefore, less groundwater impacts as compared to the 2007 final EIS approval. We are pleased with the proposed reclamation design to a more protective approach. In our letter (December 20, 2007) we raised significant issues with the groundwater analysis. Our concerns were associated with conclusions that Idaho water quality standards would be met based on clean-up activities under CERCLA. With the exception of the 2008 removal action at the Pole Canyon cross valley fill, clean-up remedies remain speculative. We appreciate USFS/BLM staff's time talking with us about this issue throughout the DEIS development. From our conversations, we understand that groundwater to surface water transport would not occur for decades³; although, the DEIS does not clearly discuss this groundwater/surface water interaction. We recommend that the final EIS include current groundwater curves illustrating the time sequence and potential influence to surface water (i.e., Crow Creek).

As stated previously, the DEIS tiers to the previous 2007 FEIS and references a groundwater report. The referenced groundwater report forms the basis of conclusions in the DEIS regarding the existence of a hydrologic divide between Panel G and the contaminated groundwater/surface water in the northern portion of the site. Although tiering may be appropriate for this analysis, we believe that the issues related to groundwater warrant the inclusion of pertinent and more recent groundwater/surface information. Notably from Table 1.7-1 of the DEIS, it is evident with the number of scoping comments received on water resources and selenium that this is a key issue. We encourage the BLM to further disclose groundwater/surface water information in the NEPA document. This includes summary from the groundwater technical report (or included as an appendix) and figures.

Recommendations:

- Include current information (i.e., hydrologic modeling from CERCLA effort) in the analysis.
- Include additional detail regarding groundwater/surface water quality, particularly cumulative effects in Crow Creek at the confluence of South Fork Sage Creek and downstream.
- Include summary of referenced groundwater report and pertinent figures such as: generalized stratigraphic column, groundwater curves, and groundwater flow.

Financial Assurance

The DEIS includes a section on reclamation and financial assurance (Section 2.4.8). The discussion provides general information regarding the process, commitment to approve the financial amount prior to ground disturbing activities, and the periodic review of the adequacy of the bond. However, there is no detail regarding estimated costs or information regarding potential long-term monitoring.

One of the EPA's primary concerns with mining is securing adequate financial assurance for reclamation, closure and post closure activities. NEPA provides for the disclosure of all information concerning environmental consequences of a proposed action to the public and decision-makers before the decisions are made and before actions are taken. One key aspect that should be discussed is the likelihood that mitigation will be implemented⁴. Although NEPA regulations do not directly refer to disclosure of financial assurances, the amount and viability of financial assurance are key factors in a

³ Figure 30 groundwater curves provided by lead agency during interagency meeting.

⁴ CEQ. 2011. "Appropriate Use of Mitigation and Monitoring and Clarifying the Appropriate Use of Mitigated Findings of No Significant Impact."

discussion of whether mitigation will be implemented. Another key component to determining the environmental impacts of a mine is the effectiveness of closure and reclamation activities, including long-term water management. The amount and viability of financial assurance are critical factors in determining the effectiveness of reclamation and closure activities and, therefore, the significance of the environmental impacts.

We recommend that the final EIS analysis disclose the estimated cost to reclaim and close the site in a manner that achieves reclamation goals and post-mining land use objectives. The proposed financial assurance mechanisms should be identified. The analysis should disclose costs associated with implementing the reclamation plan, as well as costs associated with implementing contingency measures to deal with reasonably foreseeable but not specifically predicted outcomes. This is necessary to inform the public and decision-makers of the financial risk to the public posed by conditions at the site. These financial assurances should be in a form that protects the public interest in the event that a company is unable to implement contingency measures or perform long-term operation and maintenance at a closed mine site. The EPA believes that it is critical to anticipate environmental impacts that are reasonably foreseeable, yet not specifically predicted and to have financial assurance mechanisms in place to deal with such contingencies.

The DEIS states that the GCLL cover would require monitoring in perpetuity (Section 2.4.4.4). We acknowledge that applying GCLLs on proxy mine sites is relatively new and the surrogate for evaluating their performance is based on landfill disposal sites. We believe that maintenance during some timeframe will be necessary, which does not appear to be captured in the financial assurance discussion. We strongly encourage BLM to consider costs associated with long-term monitoring and potential maintenance in the bond estimate.

Recommendations- the final EIS should:

- Include detailed information regarding the cost estimate and bonding instrument.
- Discuss whether the long-term monitoring and maintenance contingency would be included in the bond.

Monitoring and Adaptive Management

The DEIS discusses aspects of the water management plan including water management ponds. The water management is primarily focused on sediment reduction. We are concerned with stormwater runoff interacting with seleniferous material during operations and prior to the applying the cover. The DEIS notes that water will be monitored for COPCs; however, there is no discussion of water management in the event that selenium and/or other COPCs are present. The final EIS should include a discussion of contingencies and adaptive management related to water resources.

The DEIS includes water monitoring locations (Figure 3.4-1). Monitoring station SW-CC-500 is located on Crow Creek; however, this station is upstream of the confluence of SFSC which is the main source of selenium contamination detected in Crow Creek. The final EIS should include monitoring with respect to cumulative selenium loading to Crow Creek at the confluence of SFSC and downstream. Monitoring of Crow Creek at the confluence with SFSC and continuing downstream should be a requirement in this document to insure that Panel G does not contribute to inorganic loading in the lower reaches of Crow Creek. It is recommended that coordination with the CERCLA monitoring efforts be explored to share

data from these monitoring locations. Such monitoring could assist in adaptive management at Panels F & G.

A section on adaptive management was not included in the DEIS. We believe adaptive management is an integral component of managing mine sites to ensure resource protection. Key components of this plan would be a clear statement of expectations, linkage among monitoring information, action or trigger levels, resultant changes in operations, and the timing of follow up actions. The adaptive management plan would include specific and unambiguous descriptions of each trigger or action level. For each action level or trigger, include a description of necessary follow-up actions and a discussion of potential corrective actions that may ultimately be necessary to avoid or correct adverse impacts to the environment, along with an estimate of the time needed to implement such measures. This type of plan would ensure that water quality and post-mining land use objectives can be achieved and sustained in the future, and avoid the types of problems that have occurred at other large mine sites. A discussion of these key components should be included in the final EIS. We also suggest including a table that demonstrate adaptive management measures.

Recommendations- the final EIS should:

- Discuss how water would be managed during operation and measures that would be implemented in the event that COPCs are present.
- Discuss how monitoring of water originating from Panel G would will be incorporated into potential loading increase at Crow Creek along additional stream segments that are currently impacted by South Fork Sage Creek.
- Include a figure illustrating water management flow (water balance) and mine facilities.
- Include an adaptive management plan discussion with table highlighting the key components.

Other recommendations

- The EIS should discuss whether the Corps of Engineers will be publishing a public notice for the revised permit.
- The EIS should discuss the 404 (b)(1) analysis and mitigation to jurisdictional Waters' of the US (0.002 wetlands and 30 feet of waters).
- The EIS should discuss the mine life of the project in the context of the resource at Smoky Canyon Mine.

Environmental Protection Agency Rating System for Draft Environmental Impact Statements Definitions and Follow-Up Action*

Environmental Impact of the Action

LO - Lack of Objections

The U.S. Environmental Protection Agency (EPA) review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC - Environmental Concerns

EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce these impacts.

EO – Environmental Objections

EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no-action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU - Environmentally Unsatisfactory

EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

Adequacy of the Impact Statement

Category 1 – Adequate

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis of data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2 – Insufficient Information

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses or discussion should be included in the final EIS.

Category 3 - Inadequate

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the National Environmental Policy Act and or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

* From EPA Manual 1640 Policy and Procedures for the Review of Federal Actions Impacting the Environment. February, 1987.

